

WE CLAIM AS OUR INVENTION:

1. An implantable retainer, deliverable via an elongate tubular delivery device for retaining vaso-occlusive device in an aneurysm, comprising:

- (a) a core wire having a proximal end and a distal end,
- (b) a joint extending between the distal end of the core wire and at least one array element, said joint being electrolytically severable upon application of a suitable current to said joint, said joint being comparatively more susceptible to electrolytic severability than said core wire and said at least one array element, and

(c) a retainer assembly comprising said at least one array element, said retainer assembly having a first delivery shape when retained within said elongate tubular delivery device and having a distal delivery end and a proximal delivery end, and a second deployed shape, different than first delivery shape, when said retainer assembly is not retained within said tubular delivery device and having a distal deployed and an proximal deployed end, said at least one array element extending outwardly from said joint in said second deployed shape, and wherein after electrolytic severance from said core wire, said retainer assembly includes a residual joint.

2. The implantable retainer of Claim 1, wherein said core wire is covered with an electrical insulation layer from near its proximal end to near its distal end.

3. The implantable retainer of Claim 1, wherein said at least one array element comprise platinum.

4. The implantable retainer of Claim 1 wherein said at least one array elements comprise tantalum.

5. The implantable retainer of Claim 1 wherein said at least one array element comprise stainless steel.

6. The implantable retainer of Claim 1 wherein said at least one array element comprise a super-elastic alloy.

7. The implantable retainer of Claim 1 wherein at least a portion of said at least one array element is covered by radio-opaque material.

8. The implantable retainer of Claim 7 wherein said radio-opaque material is platinum.

9. The implantable retainer of Claim 1 wherein when said retainer assembly is in said second deployed shape, each of said at least one array element terminates remotely from said joint.

10. The implantable retainer of Claim 1 wherein said retainer assembly further comprises a plurality of exterior array elements which open proximally of said at least one array element.

11. The retainer element of Claim 10 wherein said exterior array elements open distally of the proximate end of the array element.

12. The implantable retainer of Claim 10 wherein said exterior array elements are located generally perpendicular to said joint.

13. The implantable retainer of Claim 1 wherein said proximal deployed end is distal of said proximal delivery end when the retainer assembly is in the second deployed shape.

the implantable retainer of Claim 1, wherein said proximal delivery and wherein said shape.

the implantable retainer of Claim 1, wherein the shape of a vascular aneurysm.

the implantable retainer of Claim 1, wherein the volume and wherein said implantable device is an occlusive device.

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17. An apparatus for use within a body lumen comprising:

a wire;

a selective detachable joint;

an expandable cage, said joint coupling said cage to said wire; said expandable cage capable of assuming a collapsed and expanded configuration, said expanded configuration being self-assumed by said cage when said cage is freed of confinement,

whereby, said cage expands for deployment within said body lumen.

18. The apparatus of Claim 17 further comprising a catheter, said wire and expandable cage being selectively disposable within said catheter when said cage assumes said collapsed configuration and selectively disposable outside of said catheter wherein said cage assumes said expanded configuration.

19. The apparatus of Claim 18 wherein said body lumen includes at least one coil disposed therein and wherein said cage retains said coil within said body lumen when said cage is in said expanded configuration.

20. The apparatus of Claim 19 wherein said body lumen is an aneurysm and said catheter being used to position said cage into said aneurysm, said cage assuming said expanded configuration as such cage is being disposed from said catheter into said aneurysm, said coil being disposed in said aneurysm and retained therein by said cage.

21. The apparatus of Claim 18 wherein said body lumen is a vessel and said free coil is disposed in said vessel, said cage capturing said free coil in said vessel when said cage is in said expanded configuration to allow said captured free coil to be removed with said cage from said vessel.

22. The apparatus of Claim 17 wherein said cage is comprised of a plurality of wires having a memory so that when said cage is free of confinement, it assumes a prebiased shape memorized by said plurality of wires.

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23. The apparatus of Claim 22 wherein said cage is comprised of a plurality of wires in the form of a cylindrical barrel.

24. The apparatus of Claim 23 wherein said cylindrical barrel cage has a bottom and top apex where said plurality of wires are commonly joined together.

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25. The apparatus of Claim 17 wherein said detachable joint is electrolytically disintegrated to detach said wire from said cage.

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26. The apparatus of Claim 17 wherein said detachable joint is an electrolytically disintegratable region.

27. The apparatus of Claim 25 wherein said detachable joint is an electrolytically disintegratable bead.

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28. The apparatus of Claim 26 wherein said electrolytically disintegratable region comprises a flexible electrolytically disintegratable coil coupled between said wire and said cage.

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29. The apparatus of Claim 28 wherein said electrolytically disintegratable region further comprises a tapered tip of said wire extending through said coil and coupled to said cage.

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30. The apparatus of Claim 17 wherein said cage comprises a plurality of wires, each wire having two ends, one end of each said wires being coupled together

Common apex and opposing
a curved hook shape.

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